

Amendments to the Specification

Please replace the paragraph beginning on page 1, line 8 with the following amended paragraph:

The present invention claims priority to commonly assigned Swedish Patent Application Serial No. 9903945-5 filed October 29, 1999 and to PCT Patent Application Serial No. PCT/SE00/02059 filed on October 24, 2000, the entire contents of all of which are hereby incorporated by reference in their entirety for all purposes. The present application is also related to commonly assigned, co-pending U.S. patent application 09/712,131 applications entitled "An antenna device for transmitting and/or receiving RF waves", now U.S. Patent No. 6,392,610; U.S. patent application 09/712,181 entitled "Antenna device and method for transmitting and receiving radio waves"[[.]]; and U.S. patent application 09/712,133 entitled "Antenna device and method for transmitting and receiving radio frequency waves", all of which were filed [[the]] concurrently herewith. These applications are based on the following corresponding PCT applications: PCT/SE00/02058; PCT/SE00/02056; and PCT/SE00/0205, respectively, all filed on October 24, 2000, the entire contents of which are hereby incorporated by reference in their entirety for all purposes.

Please replace the paragraph beginning on page 19, line 6 with the following amended paragraph:

A simple and easily implemented algorithm is a switch-and-stay algorithm, which is shown in the flow diagram of Fig. 9. Here switching is performed between predefined

states $i = 1, \dots, N$ (e.g. $N = 2$, one state being optimized for FS and the other state being optimized for TP). A state $i = 1$ is initially chosen, whereafter, in a step 65, the VSWR is measured. The measured VSWR is then, in a step 66, compared with a predefined limit (the threshold value). If this threshold is not exceeded the algorithm is returned to step 65. If this threshold is exceeded, the algorithm proceeds to step 67, whereby switching to a new state $i = i + 1$ is performed. If $i + 1$ exceeds N , switching is performed to state 1. After this step, the algorithm returns to step 65.